

In the Claims:

Please cancel claims 1-17 without prejudice.

Please add the following new claims (claims 18-29):

18. A method for regulating cellular levels of p53 protein comprising administering to cells a vector comprising a nucleic acid encoding a protein or polypeptide, wherein the protein or polypeptide is an inhibitor of the activity of calpain, wherein the encoded protein or polypeptide inhibits the activity of calpain upon its expression in the cells, thereby regulating cellular levels of p53 protein.
19. The method according to claim 18, wherein the vector is a viral vector selected from the group consisting of adenoviruses, retroviruses and adeno-associated viruses.
20. The method according to claim 18, wherein the vector is a lipid liposomal vector.
21. The method according to claim 18, wherein the nucleic acid encodes all or part of calpastatin.
22. The method according to claim 21, wherein the nucleic acid comprises all or part of sequence SEQ ID No. 1.
23. The method according to claim 21, wherein the nucleic acid has a sequence selected from the group consisting of SEQ ID No. 1 and SEQ ID No. 3.
24. The method according to claim 18, wherein the nucleic acid encodes a protease inhibitor.
25. The method according to claim 24, wherein the protease inhibitor is leupeptin.
26. A viral vector comprising a nucleic acid encoding a protein or polypeptide, wherein the protein or polypeptide is an inhibitor of the activity of calpain.
27. The vector according to claim 26, selected from the group consisting of adenoviruses, retroviruses and adeno-associated viruses.
28. The vector according to claim 26, comprising a sequence encoding all or part of calpastatin.
29. A composition comprising a nucleic acid encoding all or part of calpastatin that has the capacity to inhibit, at least in part, calpain, formulated for intra-tumor administration.